2. The Global Youth Tobacco Survey (GYTS)

WHO and CDC organised a small technical meeting in Geneva on 7 – 9 December 1998, to plan for the development and implementation of an initial baseline assessment of tobacco-use by young people in each country using a school survey instrument – the Global Youth Tobacco Survey (GYTS). The purpose of the meeting was to work with a key tobacco control expert from each country to develop a suitable instrument to use for the survey. Thirteen countries participated in the activating phase (Phase 2) of this project in 1999. South Africa formed part of this group of countries which implemented this survey. Presently, 111 countries are currently involved in various stages of participating in the GYTS.

The survey questionnaire was designed to have a core set of questions to be used by all countries. In addition, it was also designed to be flexible enough to include specific issues and individual needs of each of the participating countries (i.e. optional questions could be added). The survey is intended to enhance the capacity of countries to design, implement, and evaluate the tobacco control and prevention programmes for young people which will be initiated at the country level.

The GYTS is a school-based tobacco specific survey which focuses on adolescents age 13 – 15 (Grades 8 – 10). School surveys have been found to be useful tools in gathering data as they are relatively inexpensive and easy to administer, tend to report reliable results, and refusals are significantly lower than in household surveys. The most common research approach for this specific population, has been the self-administered questionnaire.

In order to ensure the development of a comprehensive tobacco control programme for SA, the Medical Research Council (MRC), in addition to conducting the GYTS, is also conducting several in-depth qualitative and quantitative determinant studies that clearly and succinctly target local tobacco-using behaviours.

2.1 Objectives of the GYTS

- To document and monitor the prevalence of tobacco-use including: cigarette smoking, and current use of smokeless tobacco, cigars or pipes.
- To obtain an improved understanding of and to assess learners' attitudes, knowledge and behaviours related to tobacco-use and its health impact, including: cessation, environmental tobacco smoke (ETS), media and advertising, minor's access, and school curriculum.

2.2 Content of GYTS

The GYTS addresses the following issues:

- the level of tobacco-use
- age at initiation of cigarette use
- levels of susceptibility to become cigarette smokers
- exposure to tobacco advertising
- identifying key intervening variables, such as attitudes and beliefs on behavioural norms with regard to tobacco-use among young people which can be used in prevention programmes

2.3 Methodology

2.3.1 Sampling

The survey was planned for all nine provinces in South Africa. A two-stage cluster sample design was used to obtain a nationally representative sample of learners in Grades 8, 9 and 10. The first-stage sampling frame consisted of all public schools containing any of Grades 8, 9 and 10. Schools were selected with a probability proportional to the school enrollment size i.e. larger schools had a greater chance of being selected. Enrollment data was obtained from Provincial Departments of Education.

The second sampling stage consisted of systematic equal probability sampling (with a random start) of classes from each school that participated in the survey. All Grade 8, 9 and 10 classes in the selected schools were included in the sampling frame. All learners in the selected

classes were eligible to participate in the survey.

The aim was to select 13 schools per province with an 80% expected participation rate i.e. 10 schools per province. The enrollment distribution across the provinces necessitated an increase in the number of schools selected in five provinces viz. Eastern Cape, Gauteng, North West, Northern Cape and Western Cape. The target number of learners per province was 625 with an expectation of 500 completed questionnaires. The target for the sample size took into account time, financial and human resources.

2.3.2 Questionnaire Development

The South African version of the questionnaire (Appendix I) consisted of 93 questions: 54 core questions and 39 additional questions in order to take into account local tobacco-using behaviour and the psycho-social, cultural and contextual determinants thereof. Many questions were included to determine the extent of smokeless tobacco-use among youth as this was highlighted from qualitative studies conducted by the authors in the Southern Cape Karoo Region of the Western Cape Province. Several challenges were encountered when developing local questions, for example, the names of the five most popular brands of cigarettes used by the youth in South Africa for the question on brand preferences were not known. This question had to be developed by using the 15 brands of cigarettes most heavily advertised in South Africa.

South Africa has 11 official languages. It was necessary to translate the questionnaire, the parent notification form and the script for survey administrators into several languages. The initial letter to the principals was in English, the language most commonly used within the Department of Education. It is also the medium of instruction in most schools in South Africa.

The questionnaire was translated into seven languages. Initially it was translated from English to Afrikaans, Xhosa and Zulu. However, further discussions with principals resulted in the English questionnaire being translated into another three languages viz. North Sotho, South Sotho and Tsonga (Appendix II). The translation of the English questionnaire into other languages required cultural sensitivity and was a necessary but time consuming exercise. Translated questionnaires were checked by back-translating them into English. The translated questionnaires differed in length due to varying sentence construction in each language. In some languages, there were words that did not have a direct translation e.g. in Tsonga, one word is used for all tobacco products, so "snuff" was translated as "tobacco that is sniffed" and "chewing tobacco" as "tobacco that is "chewed".

In order to ensure face validity, the questions were pre-tested in the various languages. At the pilot phase of the project, the time required to complete the questionnaire was established. Learners required between 20 to 60 minutes to answer all questions.

2.3.3 Data Collection

Before data collection could take place, extensive networking occurred with the various stakeholders in the Departments of Health and Education to obtain their endorsement and support for the project. The project was discussed in detail with the Director of Health Promotion and it was agreed that GYTS would be linked to the Health Promoting Schools Initiative, using tobacco control as an entry point for Health Promoting Schools. This facilitated the participation of staff of the Provincial Health Promotion Departments as survey administrators. Letters were sent to the Provincial Directors of Health Promotion. All agreed to coordinate the allocation of survey administrators to the selected school.

Letters were sent to all the principals of the 160 selected schools inviting them to participate in the GYTS. This letter also asked for enrollment figures as well as the language preference of the learners.

After schools had indicated their willingness to participate, a letter was sent to schools listing the classes that were chosen. Copies of the Parent Notification Form for each learner in the selected class accompanied this letter. The principal took responsibility for the distribution of letters informing learners and parents about the study and requesting their consent.

Training workshops with survey administrators were held over a two week period in all nine provinces. Each survey administrator was assigned one, two or three schools depending

on whether the selected school was located in their area of responsibility.

Packages were couriered to the survey administrators due to delays in printing of questionnaires and a postal strike. A specific pencil had to be used for completion of the answer sheet to facilitate automated capturing of data. The answer sheets were checked and enrolment data was reconciled with the number of questionnaires. They were then couriered to the Centers for Disease Control, USA, where the data was captured.

2.3.4 Analysis

A weighting factor was applied to each learner record to adjust for non-response and for the varying probabilities of selection. Epi Info and SUDAAN, a software package for statistical analysis of correlated data, were used to compute prevalence rates and 95% confidence intervals for the estimates. Differences between prevalence estimates were considered statistically significant if the 95% confidence intervals did not overlap.